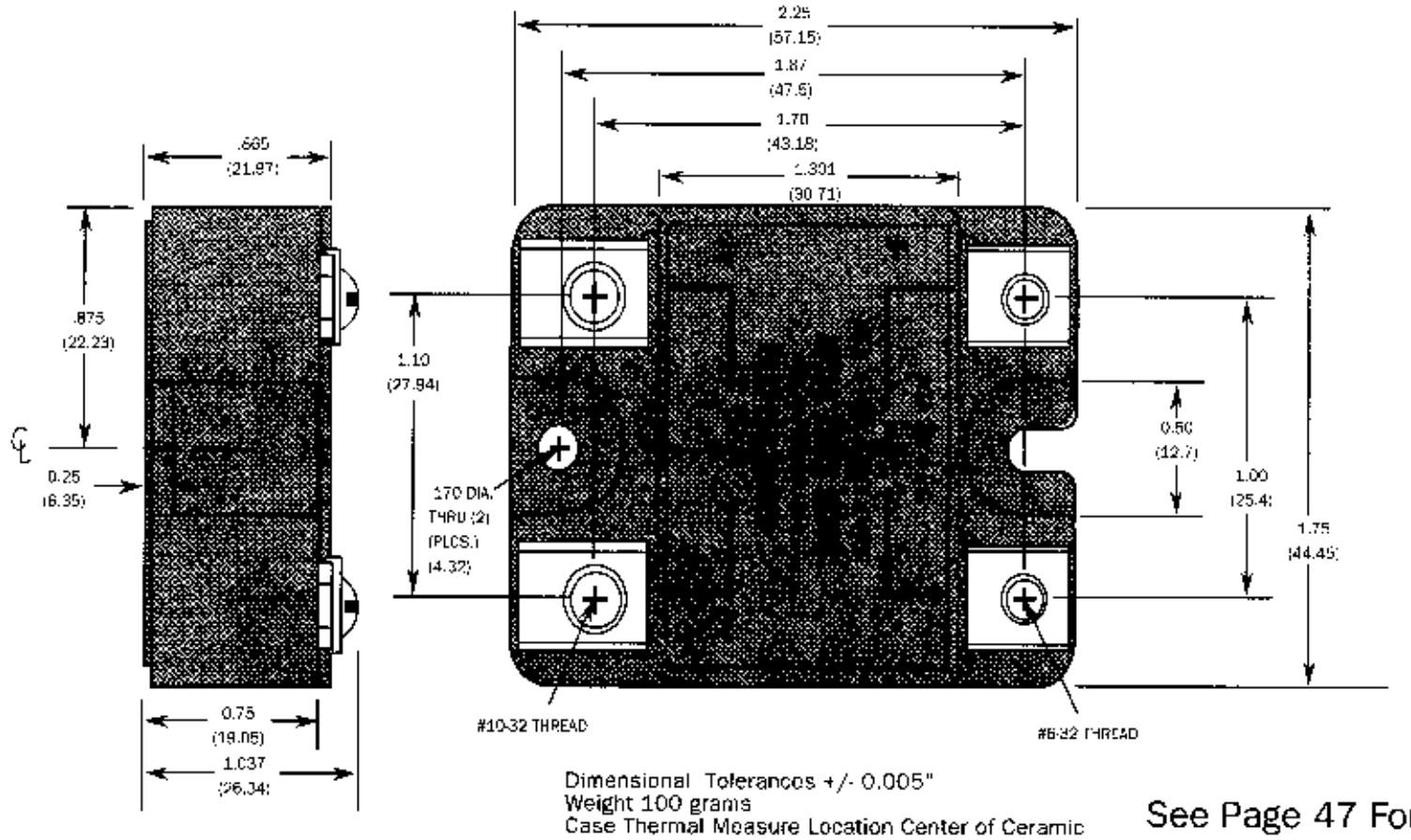
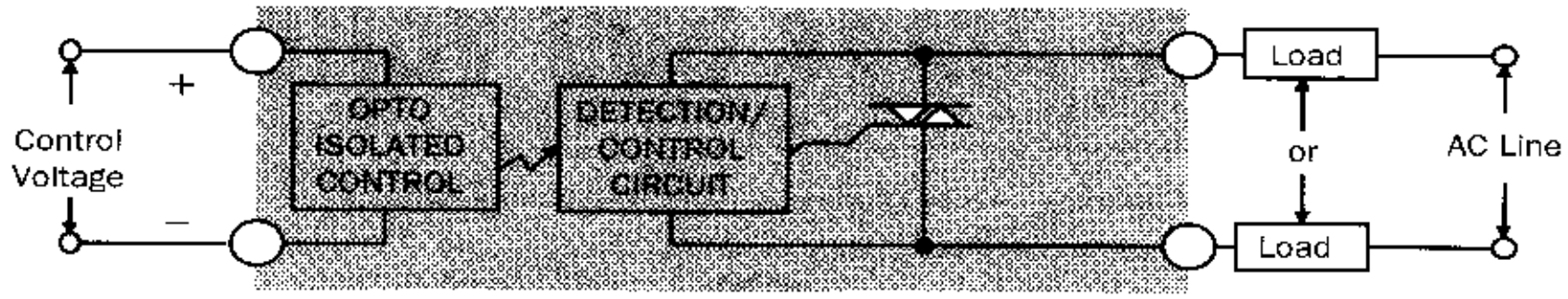
DIMENSIONAL DRAWING



Dimensional Tolerances +/- 0.005"
Weight 100 grams
Case Thermal Measure Location Center of Ceramic

See Page 47 For Graphs

ELECTRICAL SCHEMATIC



Features

- TRIAC output
- Choice of zero and non-zero crossing units.
- Exposed ceramic baseplate for reduced thermal resistance and lower operating temperature.
- Low electrical resistance due to uninterrupted runs between the power terminals and the TRIAC via the leadframe.
- Floating screw type power terminals in a high temperature plastic housing for mechanical ruggedness.
- Integrated drive circuitry.
- UL & CSA recognized.
- Designed to comply with V.D.E. requirements.

General Description

Gentron's AC Solid State Relays are designed for controlling medium amounts of power with a low level DC Logic Input Signal. They incorporate a TRIAC design to provide full wave capability with high dV/dt capability. Zero Crossing Drive Circuitry switches on minimizing the effects of inductive loads. Non-Zero Crossing Drive Circuitry allows for phase control capability as well as on/off control. The opto-coupler provides the interface to the logic level DC input signal and electrical input/output isolation.

Typical Applications

- On/Off and phase control of high power AC equipment.
- Interfacing of microprocessor controls to AC loads - lights, motors, heaters, valves, solenoids, etc.
- Electro-mechanical line contactor replacement.
- Industrial and process controls.
- Programmable controller interface.
- Robotic motor position and speed controls.
- Light dimmers.
- Transformer tap switch.
- Phase Proportional Drives

Options

- Soft Start.
- Current Limit
- Thermal Limit
- Energy Saver
- Proportional Control
- LED on Indicator
- Breakers see page 132

TYPE	DC INPUT ZERO CROSS SWITCHING	DC INPUT NON–ZERO CROSS SWITCHING	AC INPUT ZERO CROSS SWITCHING
NOMINAL LINE VOLTAGE – VAC	240	240	240
MODEL NUMBER	SSRT 600 240 D10	SSRT 600 240 R10	SSRT 600 240 A10

INPUT SPECIFICATIONS

MAX. INPUT CURRENT	15 mA @ 5VDC		15 mA @ 90VAC
MAX. INPUT VOLTAGE – VDC	32	26	(VAC) 280
MIN. INPUT VOLTAGE – VDC	3	3.5	(VAC) 90
MIN. TURN-OFF CURRENT – mA DC	0.25		2.5 mA (AC)
MIN. TURN-OFF VOLTAGE – VDC	1	1	(VAC) 10
MAX. TURN-ON TIME - mS	8.3	0.02	8.3
MAX. TURN-OFF TIME - mS	8.3		
MAX. REVERSE VOLTAGE – VDC	-32	-32	N/A
MAX. INPUT TO OUTPUT CAPACITANCE - pF	10		
MAX. ELECTRICAL ISOLATION - VRMS (INPUT TO LOAD TERMINALS)	4000		

OUTPUT CHARACTERISTICS

MIN. LINE VOLTAGE – VAC	24	24	24
MAX. LINE VOLTAGE – VAC	240	240	240
MAX. TRANSIENT OVERVOLTAGE– VAC PEAK	600	600	600
MIN. LOAD CURRENT @ 85 °C - A	0.05		
MAX. LOAD CURRENT @ 85 °C - A	10		
MAX. ON-STATE VOLTAGE DROP @ MAX RATED CURRENT - V	1.5		
MAX. OFF-STATE LEAKAGE CURRENT @ 25 °C (NO RC)- mA	0.5		
MAX. SINGLE-CYCLE SURGE CURRENT (16.7 mSEC NON-REPETITIVE @ 85 °C) - A	100		
MAX. FUSING I(2)T VALUE (8.3 mSEC) - A(2) SEC	60		
MAX. dV/dt CAPABILITY (T(C)=85 °C) - V/µSEC	200		
MIN. OPERATING FREQUENCY - Hz	50		
MAX. OPERATING FREQUENCY - Hz	60		
MAX. POWER DISSIPATION (T(C)=85 °C) - W	50		
MAX. THERMAL RESISTANCE, JUNCTION-TO-CASE (JC) - °C/W	0.6		
MAX. ELECTRICAL ISOLATION (ALL TERMINALS TO HEATSINK) = VRMS FOR 1 MIN WITH UNIT MOUNTED PROPERLY - V	4000		
MIN. OPERATING TEMPERATURE - °C	-25		
MAX. OPERATING TEMPERATURE - °C	125		
MIN. STORAGE TEMPERATURE - °C	-40		
MAX. STORAGE TEMPERATURE - °C	125		
POWER FACTOR RANGE	0.5-1.0		